

Application Serial No. 10/058,416

Reply to Office Action of July 11, 2003, and further to the Notice of Appeal filed January 12, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-6. (Cancelled).

7. (Currently Amended) A semiconductor detector for use in a high-speed X-ray CT, said detector comprising:

a plurality of detector modules each comprising a plurality of X-ray detection pixels arranged unidirectionally on a single planar semiconductor substrate,

said plurality of detector modules arranged polygonally around a circumference of a measuring area in the shape of a contiguous polygon which is and placed opposite a single, ~~non-rotating~~ fixed emitter, said fixed emitter located outside said circumference.

8. (Previously Presented) The semiconductor detector according to Claim 7, wherein said semiconductor substrate comprises:

a CdTe semiconductor.

9. (Previously Presented) The semiconductor detector according to Claim 7, comprising:

a printed circuit board on which said single semiconductor substrate is provided and wherein the plurality of X-ray detection pixels formed on the semiconductor substrate is

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arranged along a longitudinal direction of said semiconductor substrate.

10. (Previously Presented) The semiconductor detector according to Claim 9, wherein the plurality of X-ray detection pixels on said single semiconductor substrate is arranged in a line.

11. (Previously Presented) The semiconductor detector according to any one of Claims 7 to 10, wherein the X-ray detection pixels comprise:

electrodes formed on the single semiconductor substrate by means of photolithography.

12. (Currently Amended) A method for manufacturing a semiconductor detector for use in a high-speed X-ray CT, said method comprising the steps of:

obtaining a plurality of detector modules having a plurality of X-ray detection pixels on a single planar semiconductor substrate of each of the detector modules whose electrodes are made by photolithography;

arranging the plurality of said detector modules polygonally around ~~the a~~
circumference of a measuring area in the shape of a contiguous polygon; and

placing the arranged plurality of detector modules opposite a single, non-rotating fixed
emitter, said fixed emitter located outside said circumference.

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13. (New) A high-speed X-ray CT device, comprising:

a fixed emitter; and

a plurality of detector modules each comprising a plurality of X-ray detection pixels arranged unidirectionally on a semiconductor substrate,

said plurality of detector modules arranged polygonally around a circumference of a measuring area and placed opposite said fixed emitter, said fixed emitter located outside said circumference.